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| 22045 | 7590 | 09/17/2009 | | |
| BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075 | | | EXAMINER YU, GINA C | |
| | | | ART UNIT 1611 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/534,652

Applicant(s)

SCHNEIDER ET AL.

Examiner

GINA C. YU

Art Unit

1611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 03/17/2008 & 07/12/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Receipt is acknowledged of applicant's claim amendment and response filed on June 17, 2009. The restriction requirement made on June 9, 2009 is withdrawn in view of the claim amendment made on claim 16 to include all the limitations of claim 9. Species election requirement made on March 24, 2009 is also withdrawn in view of the prior arts cited in the present Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "a narrow particle size distribution" in claim 16 is a relative term which renders the claim indefinite. The term "narrow" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 21 recites the limitation "the organopolysiloxane (B)" in 9. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al. (US 6437008 B1) in view of Sejka (US 5336715).

Sejka teaches organopolysiloxane of the general formula $R_a Y_b Si(OR^1)_c O_{4-a-b-c}$,
wherein R can be a hydrogen or a monovalent organic radical free from basic nitrogen, R¹ can be hydrogen, an alkyl radical or an alkoxyalkyl radical; a is 0, 1, 2, or 3; b is 0, 1, or 2; and c is 0, 1, 2, or 3, with the proviso that the sum of a, b, and c in the units of formula (I) is less than or equal to 3 and that at least one radical Y is present per molecule. See col. 2, lines 10 – 35; instant claim 10. The radical Y can be a monovalent and a SiC-containing radical, wherein the radicals Y preferably have the formula R²NR₃– in which R² can be hydrogen, or alkyl, cycloalkyl, or aminoalkyl radicals; and R₃ is divalent hydrocarbon radical. The reference teaches a particularly preferred example of radical Y is H₂N(CH₂)₂NH(CH₂)₃–, which meets the instant claim 9 when x is 3, R₂ is hydrogen, R₃ is methyl group. See col. 2, line 56 - col. 3, lines 21. The reference also teaches the emulsion contains alkoxyated alcohol such as fatty alcohol polyglycol ethers based on isotridecyl alcohol containing 6-15 ethylene oxide units, which meets the emulsifier limitation of instant claim. See instant claims 9 and 12. The reference further teaches the alcohol may be present from 25-150 % by weight

based on the total weight of constituent (A). See col. 4, lines 29 - 47. The reference teaches in addition to the organosilicone (A), the composition may comprise cyclic diorganopolysiloxanes and alkoxysilanes, meeting instant claims 14-15. See col. 4, lines 39 - 51. Example 1 describes a method of preparing the prior art aminosiloxane emulsion, wherein about 40 parts of the aminosiloxane is mixed with 3 parts of acetic acid, 7 parts of oleic acid and 25 parts of butyl glycol and 25 parts of coconutalkyldimethylbenzylammonium chloride (emulsifiers). The reference teaches the organopolysiloxane composition is water-dilutable and used as impregnating agents or agents for imparting water-repellent properties to building materials. See col. 6, lines 25 - 49.

Sejпка does not specifically disclose oil-in-water emulsion formulations.

Ikeda teaches aqueous organopolysiloxane emulsion and method for the preparation thereof, wherein the emulsion comprises 80-90 % by weight of an organosiloxane and from 1-15 % by weight of a cationic, anionic, or nonionic surface active agents, and 5-25% of water. The organosiloxane has the formula $R^1_aSiO_{(4-a)/2}$ wherein R^1 may be monovalent hydrocarbon groups having 1-20 carbon atoms, including amino-substituted alkyl groups, such as 3-(N-2-aminoethylamino)-propyl group. See col. 3, lines 29 - 40. The reference teaches the prior art emulsion has the emulsified organopolysiloxane droplets in the range of 0.1-1.0 mm. See col. 2, lines 34 - 40. The examples teach the prior art emulsions result in viscosity of less than 50,000 mPa's. The reference teaches the oil-in-water emulsion or organopolysiloxane are used

in various industries including cosmetics, polishing compositions, mold-release agents, fabric-finishing agents, etc., and have good storage stability. See col. 1, lines 6 – 11.

It would have been obvious to one of ordinary skill in the art at the time of the present invention to modify the teachings of Sejpka by formulating an oil-in-water emulsion with high content of organopolysiloxane, as motivated by Ikeda, because the latter teaches to make such aqueous emulsion of high content of organopolysiloxane with good storage stability and uniform organopolysiloxane droplet sizes. Since Ikeda teaches organopolysiloxanes with amino-substituted alkyl groups may be used in the emulsion formulation with emulsifiers, the skilled artisan would have had a reasonable expectation of successfully producing a stable aqueous emulsion of high content of the organosiloxanes of Sejpka by combining the teachings of the references.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 9-22 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 5336715 (Sejpká et al.) in view of US 6437008 B1 (Ikeda et al.).

The '715 patent claims an organopolysiloxane composition comprising a salt of a water-soluble organic or inorganic acid and an organopolysiloxane of formula $R_a Y_b Si(OR_1)_c O_{4-a-b/2}$ wherein R can be a hydrogen or a monovalent organic radical free from basic nitrogen, R₁ can be hydrogen, an alkyl radical or an alkoxyalkyl radical; a is 0, 1, 2, or 3; b is 0, 1, or 2; and c is 0, 1, 2, or 3, with the proviso that the sum of a, b, and c in the units of formula (I) is less than or equal to 3 and that at least one radical Y is present per molecule. See '715, Claims 1-2; instant claims 9-10. The radical Y can be a monovalent and a SiC-containing radical, wherein the radicals Y preferably have the formula $R_2^2 NR_3^-$ in which R₂ can be hydrogen, or alkyl, cycloalkyl, or aminoalkyl radicals; and R₃ is divalent hydrocarbon radical. The aminoalkyl radical Y is defined in col. 2, line 56, col. 3, line 21, as $H_2N(CH_2)_2NH(CH_2)_3-$, among others, meeting instant claim 9 when x is 3, R₂ is hydrogen, R₃ is methyl group. The patented composition also requires alkoxyated alcohol, which is defined as fatty alcohol polyglycol ethers based on isotridecyl alcohol containing 6-15 ethylene oxide units, among others, which meets the emulsifier limitation of instant claim. See instant claims 9 and 12. The alkoxyated alcohol may be present in amounts of from 0.1-200 % by weight of the organopolysiloxane. See '715, claim 5. The '715 patent, claim 6 requires that the composition of 1 further

comprises cyclic diorganopolysiloxanes and alkoxysilanes, meeting instant claims 14-15 of the instant application.

Sejpká does not specifically disclose oil-in-water emulsion formulations.

Ikeda is relied upon as above.

It would have been obvious to one of ordinary skill in the art at the time of the present invention to modify the patented composition of the '715 patent by formulating an oil-in-water emulsion with high content of organopolysiloxane, as motivated by Ikeda, because the latter teaches to make such aqueous emulsion of high content of organopolysiloxanes with good storage stability and uniform organopolysiloxane droplet sizes. Since Ikeda teaches organopolysiloxanes with amino-substituted alkyl groups may be used in the emulsion formulation with emulsifiers, the skilled artisan would have had a reasonable expectation of successfully producing a stable aqueous emulsion of high content of the organosiloxanes of the '715 patent by combining the teachings of the references.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GINA C. YU whose telephone number is (571)272-8605. The examiner can normally be reached on Monday through Thursday, from 8:00AM until 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on 571-272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gina C. Yu/
Primary Examiner, Art Unit 1611